# **EXAMINATION RULES**

# SECTION A AND SECTION B EXAMINATIONS

(Any notification, changes, modifications and alterations shall normally be intimated to the members through Technicians' Journal and IEI HQS website - www.ieindia.org)

#### 1. GENERAL INFORMATION

- 1.1 Only members of The Institution of Engineers (India) are permitted to appear at the examinations conducted by the Institution in conformity with their eligibility and qualifications. Eligibility and qualifications for election as members of various classes are www.ieindia.org
- 1.2 The Institution conducts the following examinations:

Section A (Non-Diploma Stream)

Section A (Diploma Stream)

Section B in the following branches of engineering

Chemical Engineering

Civil Engineering

Computer Science & Engineering

Electrical Engineering

Electronics and Communication Engineering

Materials and Metallurgical Engineering

Mechanical Engineering

Mining Engineering

Production Engineering

Textile Engineering

The examination in one or more of the above branches may be discontinued with prior notification. In addition to the above examinations, the Council of the Institution may introduce Section B examination in one or more of the following branches of engineering:

Aerospace Engineering

Agricultural Engineering

Architectural Engineering

Environmental Engineering

Marine Engineering

1.3 The Institution Examinations shall be held *twice* a year, generally in June and in December — termed as SUMMER and WINTER Examination, respectively in the schemes as may be decided by the Council. The Council may, however, change the frequency and timings, if necessary. The exact dates of examinations, the programmes thereof and the period of submission of examination application

forms shall be notified. No information will be sent to members individually.

- 1.4 Candidates shall be required to strictly adhere to the Rules for Conduct of Examinees in the Examination Hall (Appendix II) and any violation of the same shall attract penal measures, as may be decided by the Council of the Institution. The decision of the Council in all such matters shall be final and binding upon a member of the Institution.
- 1.5 The following grading system for the Institution Examinations shall be followed for all subjects of Sections A & B, laboratory experiments and project work:

Range of Marks	Grade	Grade
(out of 100)	Symbol	Point
75-100	Н	10
66-74	A	9
60-65	В	8
50-59	С	6
35-49	D	5
20-34	E	
0-19	F	

#### Notes:

- 1. Only grade will be provided in individual subjects.
- In the pass grade card of Section A/ Section B
   Examination, apart from grade in individual subjects, GPA (Grade Point Average) will also be provided.
- For a complete pass in Section A or in Section B, minimum GPA shall be 6.
- 1.6 Any subsequent change in the rules, as may be approved by the Council from time to time, shall be deemed to have been included in the Rules of the Institution Examinations. Each of such amendments shall be notified.

#### 2. DETAILS OF EXAMINATIONS

2.1 SECTION A (NON-DIPLOMA STREAM) EXAMINATION

[Technician members enrolled with the Institution are only eligible to apply for appearance in the Institution examination within the stipulated period. The enrolment includes registration for examination in Section A (Non-diploma)]

- 2.1.1 A candidate shall be required to pass in 10 (ten) subjects as given in **Appendix I**. The full marks for examination in each subject is 100 (one hundred). The duration of examination for each subject is 3 (three) hours. Detailed syllabi of prescribed subjects are given in pages 11-15.
- 2.1.2 A candidate shall be required to secure minimum grade 'C' in 8 (eight) subjects and grade 'D' in remaining two subjects to completely pass Section A (Non-diploma) examination within the stipulated period. Score of grade 'D' in two subjects shall only be considered in the last attempt provided the candidate secured at least grade 'C' in all the remaining 8 (eight) subjects with minimum GPA being 6. The score of grade 'D' or lower grade(s) in any subject(s) shall not be carried forward. A candidate shall be required to reappear in those subjects again.

Further, a candidate, who is not required to appear in all the 10 (ten) subjects (Ref. 2.1.1), shall have to secure minimum grade 'C' in each of the remaining subject(s) for a final pass.

- 2.1.3 A candidate shall not be permitted to appear in more than 4 (four) subjects in one term, including the subject(s) in which he appeared previously but could not secure minimum grade 'C'.
- 2.1.4 If a Technician member, after acquiring diploma level qualification, changes his membership to Senior Technician, he shall be considered, on request, as exempted to appear from Section A Examination provided he secured exemption (obtained Grade C or above with minimum GPA being 6) in four common subjects of same nomenclature in both Section A (Non-diploma) and Section A (Diploma) of revised syllabi. No pass grade card of Section A shall be issued. He shall be eligible to register for Section B, with requisite fee, with an undertaking that he shall not claim pass grade card for Section A. The CGPA shall be calculated only on the basis of Section B Examination, project work and laboratory experiments.

In case the Technician member secured exemption in one or more common subject(s) of same nomenclature in both the schemes of revised syllabi, grade in common subject(s) can be carried forward, on request, after change of his membership.

The change of membership from Technician

to Senior Technician for candidates, appeared in the current examination, shall be considered only after the declaration of their result as Technician members. After declaration of result, these candidates, on their election as Senior Technician members by virtue of their diploma qualification, will not be able to appear in the immediate next examination as per rules. However, they would be eligible to get fresh six-year period from the date of election as Senior Technician member to pass the examination and also eligible to get transfer of exemptions in common subject(s), if passed as Technician members.

# 2.2 SECTION A (DIPLOMA STREAM) EXAMINATION

[Senior Technician members enrolled with the Institution are only eligible to apply for appearance in the Institution examination within the stipulated period. The enrolment includes registration for examination in Section A (Diploma)]

2.2.1 A candidate shall be required to pass in 4 (four) subjects as given in **Appendix I**. The full marks for examination in each subject is 100 (one hundred). The duration of examination for each subject is 3 (three) hours. Detailed syllabit of prescribed subjects are given in pages 16-17.

A candidate may be required to qualify in less number of subjects provided such a candidate, in consideration of his academic credentials, is given exemption in one or more subjects by the Institution.

2.2.2 A candidate shall be required to secure minimum grade 'C' in 3 (three) subjects and grade 'D' in remaining one subject to completely pass Section A (Diploma) examination within the stipulated period. Score of grade 'D' in one subject shall only be considered in the last attempt provided the candidate secured at least grade 'C' in all the remaining 3 (three) subjects with minimum GPA being 6. The score of grade 'D' or lower grade(s) in any subject(s) shall not be carried forward. A candidate shall be required to reappear in those subjects again.

Further, a candidate, who is not required to appear in all the 4 (four) subjects (Ref. 2.1.1), shall have to secure minimum grade 'C' in each of the remaining subject(s) for a final pass.

2 IEI EXAMINATIONS

2.2.3 A candidate shall be permitted to appear in all 4 (four) subjects at a time in one term, including the subject(s) in which he appeared previously but could not secure minimum grade 'C'.

#### 2.3 **SECTION B EXAMINATION**

Technician/Senior Technician members enrolled with the Institution who have passed Section A of the Institution Examination or any other examination recognised by the Council as exempting therefrom

#### OR

Corporate members, who have passed Sections A & B of Institution Examinations in one branch of engineering or secured exemption therefrom for appearing in another branch of engineering, are only eligible to apply for appearance in the Institution examination within the stipulated period (Ref. 8.7)

Such candidates are required to register for Section B examination, immediately after declaration of result of Section A examination, as per the prescribed format (Appendix III), with requisite fee indicating their choice of (a) branch of engineering, (b) optional subjects selected.

- 2.3.1 A candidate shall be required to qualify in 9 (nine) subjects 6 (six) compulsory and 3 (three) optional (**Appendix I**), except in Marine Engineering branch, where a candidate is required to pass in 10 (ten) compulsory subjects and 1 (one) optional subject, out of the two. The full marks for examination in each subject is 100 (one hundred) and the duration of examination for each subject is 3 (three) hours. Detailed syllabi for prescribed subjects are given in (pages 18-157).
  - Further, a candidate shall have to complete project work and also sessional work on laboratory experiments (Ref. 12 and 13). Full marks shall be 100 (one hundred) each for project work and laboratory experiments.
- 2.3.2 A candidate shall be required to secure minimum grade 'C' in 7 (seven) subjects and grade 'D' in remaining two subjects to completely pass Section B Examination, except in Marine Engineering branch, within the stipulated period. For Marine Engineering branch, a candidate shall be required to secure minimum grade 'C' in 9 (nine) subjects and grade 'D' in remaining two subjects to completely pass Section B examination within the stipulated period. Score of grade 'D' in

two subjects shall only be considered in the last attempt provided the candidate secured minimum grade 'C' in remaining seven subjects in any branch with minimum GPA being 6, except Marine Engineering for which minimum grade 'C' shall be required for remaining nine subjects with minimum GPA being 6. The score of grade 'D' or lower grades(s) in any subject(s) shall not be carried forward. A candidate shall be required to reappear in those subjects again.

- 2.3.3 A candidate shall not be permitted to appear in more than 4 (four) subjects at a time in one term, including the subject(s) in which he appeared previously but could not secure minimum grade 'C'.
- 2.3.4 Candidates, who wish to appear in additional branch of engineering will be exempted, on request, from appearing in those subjects of same nomenclature and syllabus in which they have secured minimum grade 'C' or 50 marks and above in the Institution examination in earlier branch. However, this facility will not be applicable to candidates having passed Section B examination in old scheme and syllabus.
- 2.3.5 (i) If a candidate changes the branch of engineering before completely passing in one branch, the results in relation to all the subjects he had previously appeared, if any, shall be automatically cancelled. He is required to apply afresh for registration of Section B with requisite fee (Appendix III).
  - (ii) If a candidate changes the optional subjects either within the group or from one group to other, he shall have to register afresh with requisite fee. The results in relation to all the optional subjects he had previously appeared, if any, shall automatically be cancelled, except the common subject(s) in the groups in which a candidate has secured minimum grade 'C'.
- 2.3.6 A candidate is eligible to apply for extra subject(s), not exceeding *four* subjects in one term, after passing Section B examination, with prescribed fee. The grade(s) secured by a candidate in extra subject(s) shall not be considered for improvement of grade(s) secured by him in earlier examinations.

# 3. APPLICATION FOR APPEARING IN EXAMINATION

3.1 A candidate shall be required to submit an application

in the prescribed form to the Headquarters of the Institution at 8, Gokhale Road, Kolkata 700 020, expressing his desire to appear in a particular examination together with the requisite fee (**Appendix V**) by Bank Draft within the period (Ref. 3.2) of receipt of such forms as may be notified from time to time.

3.2 Applications shall be received at the headquarters of the Institution on working days normally within the period as per the following schedule:

# Candidates not appeared at immediately preceding examination

February 15 - March 15 (for Summer Term)

August 17 - September 15 (for Winter Term)

# Candidates appeared at immediately preceding examination

March 16 - April 14 (for Summer Term)

September 16 - October 15 (for Winter Term)

- 3.3 The Institution reserves the right to reject any application, which is not properly filled-in, does not accompany the prescribed fee, is not received within the stipulated date or for any other reason. The decision of the Institution in this respect shall be binding upon the applicant.
- 3.4 Examination fee once paid are neither refundable nor transferable to a subsequent examination or to any other account except in case of rejection of an application. In such case of rejection of an application, the fee paid will be refunded after deduction of the processing fee (**Appendix VIII**).

#### 4. IDENTITY CARD

- 4.1 Each Technician/Senior Technician member of the Institution shall be required to produce an Identity Card, issued by the headquarters of the Institution, to appear at examinations. Associates/Corporate members shall be required to apply to the Institution for issue of the Identity Card and they are required to produce the same to appear at examinations. The Identity Card shall indicate name of the member, class/grade of membership with number, postal address, photograph and specimen signature of the member duly attested by a Corporate Member of the Institution.
- 4.2 No candidate shall be allowed to appear at an Examination without production of his valid Identity Card issued by the headquarters of the Institution.
- 4.3 In case of lost/defective Identity Card, the concerned member is required to apply to the headquarters of

- the Institution for a DUPLICATE IDENTITY CARD, along with prescribed fee.
- 4.4 To effect any correction/alteration, a member is required to apply to the Institution for fresh Identity Card along with prescribed fee (**Appendix VI**) and to surrender his existing Identity Card. On surrender of such Identity Card, a fresh Identity Card shall be issued to the member.

## 5. ADMIT CARD

- 5.1 Candidates shall be required to collect their Admit Card from the Officer-in-Charge of the Examination Centre/Honorary Secretary of the State/Local Centre of the Institution, only on production of valid Identity Card of the Institution, normally three days prior to the date of commencement of the examinations.
- 5.2 A candidate shall be required to produce his Admit Card at the Examination Centre.
- 5.3 Centrewise index showing inter alia the membership class, number and corresponding roll number shall be available at respective (i) Examination Centre opted by the candidate, and (ii) at State/Local Centre, to which he is attached, for information of the applicant whose application will be in order in all respects.
- 5.4 If a candidate claims that in spite of submitting an application in conformity with Rules, he has neither been provided with Admit Card nor with any information about rejection of his application, he can submit a fresh application personally to the Officer-in-Charge along with a Special Fee (**Appendix VIII**) payable to the Institution.

In such a case, permission to appear in the examination may provisionally be accorded subject to the condition that the candidate submits documentary evidence in support of his claim and that he is ohterwise eligible to appear in the subject(s) in accordance with the Rules. In case the candidate's claim is found to be not in order by the Headquarters of the Institution at any point of time, the fee deposited by him shall be forfeited and his appearance shall be treated as irregular.

# 6. CENTRES FOR EXAMINATION

- 6.1 The examinations of the Institution are being held at the cities/towns as given in **Appendix VII**. However, the Council of the Institution reserves the right to establish or abolish one or more Examination Centres without assigning any reason whatsoever.
- 6.2 Every endeavour will be made to normally allow an

4 IEI EXAMINATIONS

applicant to appear from an Examination Centre opted by the candidate if the same is located within the jurisdiction of his State/Local Centre. However, the Institution reserves the right to allot a Centre, different from the Centre opted by the candidate, without assigning any reason whatsoever.

6.3 Request for a change of Examination Centre may not be entertained.

# 7. MEDIUM OF EXAMINATIONS AND UNITS

- 7.1 English is the medium of examinations. However, Senior Technician member, appearing Section A and Section B Examinations, on prior application, may be permitted to write his answers in all subjects in Hindi, provided he has passed the Diploma Examination in engineering in Hindi medium.
- 7.2 A candidate, once permitted to use a regional language or Hindi, shall not be permitted to use any other language in any subject subsequently.
- 7.3 SI units, standard symbols and notation are recommended for the examinations.

## 8. RESULTS OF EXAMINATIONS

- 8.1 The results of an examination shall normally be published within *fourteen* weeks after the completion of the examination. List of qualifying candidates and list of subject(s), in which the candidates secured grade 'C' or higher grade, shall be available at the office of State/Local Centre of the Institution, under which the Examination Centre is located, for information of the candidates. The information may also be available at the Institution's Website.
- 8.2 No application from a candidate for re-valuation shall be entertained under any circumstance, whatsoever.
- 8.3 Scrutiny of all answerscripts as to whether all answers in the answerscripts were valued, marks allotted in answerscripts were added correctly and marks were transferred and added correctly shall be undertaken before finalisation of results.
- 8.4 Any complaint arising out of matters, other than those mentioned in Clause 8.2 above, may be considered if lodged within 60 days after declaration of results.
- 8.5 The Council reserves the right to withhold or cancel the result of any candidate at any examination in which case the grade card will not be supplied.
- 8.6 Appearance of a candidate at an examination without being allotted a roll number shall lead to cancellation of all subjects in which he appeared in that particular examination.

8.7 A candidate shall be required to pass the examination within a specific period as mentioned hereunder:

Section A: 6 (six) years from the date of election for Technician/Senior Technician member.

Section B: 6 (six) years from next term of passing Section A Examination.

# No further extension shall be permitted beyond the stipulated period.

After expiry of six years period of Section A/Section B examination, a candidate will be required to apply for re-registration of another six years to appear afresh in all applicable number of subjects of Section A/Section B examination. Re-registration period shall be counted from the immediate next term of expiry of six year period.

The above stipulated period for Section B is also applicable to Senior Technicians/corporate members exempted to appear in Section A Examination from the date of their election as Senior Technician member or first appearance as corporate member as applicable.

Corporate members, desiring to appear in additional branch, are required to register for Section B (Ref. 2.3).

In case the candidate desires to change the additional branch of engineering, he shall be required to apply afresh (Ref. 2.3). However, for such candidates, 6-year period shall be counted from the date of his first appearance in the old additional branch.

8.8 Candidates appear in a particular session in Section A/Section B examination may appeal for verification of answerscript(s) for arithmetic correction in totaling of marks and any omission/deletion in evaluation within 15 days from the date of declaration of results at HQs of the Institution on the prescribed proforma with requisite fee (Appendix VIII). On receipt of the request from the candidate with fee, the exact date and time will be informed to him to inspect his/her answerscript at the HQs of the Institution at his own expense. In case any candidate fails to appear to inspect his answerscript(s) at the given date and time, no further opportunity shall be given for inspection of answerscript(s). It is further clarified that re-verification of answerscript shall not tantamount to re-valuation of answerscript. This is only a process of re-verification by the candidate. The relation period of such answersheets will be six months.

# 9. DISCIPLINARY ACTION

- 9.1 All cases of unfairmeans and irregularities reported to or detected by the Institution shall be investigated with intimation to the concerned candidate.
- 9.2 Pending finalisation of any case, the result of the concerned candidate shall be withheld and he shall not be eligible to appear in subsequent examinations.
- 9.3 The decision of the Institution shall be communicated to concerned candidate and shall be final and binding on him.
- 9.4 The District Court at Alipore, 24-Parganas (South), West Bengal, shall have the exclusive jurisdiction in matters arising out of conduct of Institution Examinations and/or penal measures or any decision of the Council of the Institution giving or imposing penalty to any candidate.

#### 10. CERTIFICATES

- 10.1 Provisional Certificate shall be issued on passing Section B examination to the candidate along with the grade card of Section B examination.
- 10.2 A Pass Certificate shall be issued to a candidate on his passing Section B examination. A duplicate certificate shall be issued on payment of requisite fee (Appendix VI) provided a candidate gives an undertaking that the original has been lost, and enclose a FIR/General Diary/affidavit to this effect from the competent authority.
- 10.3 Pass Certificates of any year shall be awarded to eligible candidates, at the Convocation to be held in the following year, on receipt of their written consent to attend the Convocation with valid Identity Card and grade card/provisional certificate issued by the Institution for verification.
  - After the Convocation, Pass Certificates shall be sent to the candidates by registered post, who will not be able to attend the Convocation.
- 10.4 If any candidate uses a language other than English in an examination under the provision of Rules 7.1 and 7.2, mention of the language shall be made in the certificate.
- 10.5 Candidates passing only Section B Examination in any branch will also be issued a certificate to that effect.

## 11. GRADE CARDS

11.1 The grade cards for Sections A and B complete pass candidates in an examination shall be sent by registered post. However, grade cards of unsuccessful candidates shall be sent by ordinary post.

- (i) In case of non-receipt of grade card by a candidate, who passed Section A or Section B Examination, within six weeks after declaration of results, a duplicate grade card shall be issued on submission of application in the prescribed format with requisite fee only when a candiate gives an undertaking that the original grade card has been lost, and enclose a FIR/General Diary/Affidavit to this effect from the competent authority.
- (ii) In case of unsuccessful candidates in Section A or Section B, the requirement of a FIR/General Diary/Affidavit is not applicable.

# 12. PROJECT WORK

- 12.1 A candidate shall be eligible for project work only after securing minimum grade 'C' in 5 (five) subjects in an engineering branch of Section B. Grade card along with prescribed format for project work and laboratory experiments and guidelines shall be sent to all such candidates. The prescribed format shall be returned duly filled-in by the candidates within the stipulated period.
- 12.2 On receipt of the application, a candidate shall be intimated the name and address of the project guide, who in turn shall assign the project work to the candidate.
- 12.3 Full marks for the project work will be 100 (one hundred). There will be internal as well as external evaluation of the project work. Minimum aggregate for passing project work will be grade 'B'. The internal evaluation will be carried out by the project guide based on the project report submitted by the candidate to him. One copy of the project report will be submitted by the candidate to the project guide and another copy to the Headquarters of the Institution. External evaluation will be done by the Institution. In case a candidate fails to pass the project work in one or more attempts, he shall be required to re-register again for the same with the prescribed fee. Project work shall be required to be completed within the stipulated period of 6 (six) years (Ref: Rule 8.7).
- 12.4 In case of death of the project guide or his change of address affecting the facility of contact between him and the candidate, the candidate shall inform to the Chairman of his State/Local Centre for an alternate project guide.
- 12.5 A candidate shall be required to maintain a diary and to prepare a self-assessment report in the prescribed format pertaining to the work undertaken by him as assigned by the project guide.

6 IEI EXAMINATIONS

12.6 For change of branch of engineering or optional subject(s), a candidate shall be required to apply afresh in stipulated time period, as mentioned in Rule 2.3. The time period shall not be extended for any reason whatsoever.

## 13. LABORATORY EXPERIMENTS

- 13.1 A candidate shall be eligible for laboratory experiments only after securing minimum grade 'C' in 5 (five) subjects in an engineering branch of Section B. Grade cards along with prescribed format for project work and laboratory experiments and guidelines shall be sent to all such candidates. The prescribed format shall be returned duly filled-in by the candidates within the stipulated period.
- 13.2 On receipt of the application, a candidate shall be intimated the name of the university/engineering

- college/institute, where a candidate shall be required to perform the laboratory experiments. Fee for laboratory experiments are required to be paid by the candidate as specified in the guidelines.
- 13.3 Full marks for the laboratory experiments will be 100 (one hundred). The evaluation of the same shall be carried out by the concerned university/college/institute where the candidate shall perform the laboratory experiments. Minimum grade for passing laboratory experiments will be grade 'B'. In case a candidate is not able to complete required number of laboratory experiments and obtain grade 'B', he shall be required to re-register again for the same with the prescribed fee. Laboratory experiments are required to be completed within the stipulated period of 6 (six) years (Ref: Rule 8.7).